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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Hilmar Gugel

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EXAMINER

LAVARIAS, ARNEL C

ART UNIT

PAPER NUMBER

2872

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DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/570,645	Applicant(s) GUGEL, HILMAR	
	Examiner Arnel C. Lavarias	Art Unit 2872	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 December 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 17-34 is/are pending in the application.
- 4a) Of the above claim(s) 19 and 23-33 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 17, 18, 20-22 and 34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>12/2/08</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. The amendments to Claim 17 in the submission filed 12/2/08 are acknowledged and accepted.

Response to Arguments

2. The Applicant's arguments with respect to Claims 17-18, 20-22, 34 have been considered but are moot in view of the new ground(s) of rejection.
3. Claims 17-18, 20-22, 34 are now rejected as follows.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 17-18, 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoffman (U.S. Patent Application Publication US 2002/0104961 A1), of record, in view of Kawano et al. (U.S. Patent No. 6597499).

Hoffman discloses a scanning microscope (See for example Figures 1-3) comprising an excitation light beam (See for example 3, 5 in Figure 1) configured to optically excite a first area of a specimen (See for example 25 in Figure 1); a stimulation light beam (See

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for example 7, 9 in Figure 1) configured to trigger a stimulated emission or an additional excitation in a second area of the specimen, the second area at least partially overlapping with the first area of the specimen (See for example Figure 4; Paragraph 0045); an objective (See for example 23 in Figure 1) configured to focus the excitation light beam and the stimulation light beam; an optical component (See for example 31 in Figure 1) configured to influence a shape of a focus of at least one of the excitation light beam and the stimulation light beam; and an optical system (See for example 29, 33, 19, 21 in Figure 1) configured to image the optical component into a pupil of the objective and to adjust a size of an image of the optical component. Hoffman additionally discloses the scanning microscope being at least one of a confocal scanning microscope and a double confocal scanning microscope (See Figure 1; Paragraphs 0033-0034); and the optical system including a movable focusing device (See for example 34, 35, 36 in Figure 1; Paragraph 0035). Hoffman lacks the optical system also maintaining the image of the optical component in the pupil of the objective. However, Kawano et al. teaches a conventional microscope optical system (See for example Figures 3-5) utilizing an excitation source (See for example 302 in Figure 3) and an optical component configured to influence the shape of the focus of the excitation source (See for example 324 in Figures 3-5). Further, Kawano et al. teaches an optical system (See for example 308, 312 in Figures 3, 5) configured to image the optical component into a pupil of the objective (See for example 330, 314 in Figures 3, 5) and to maintain the image of the optical component in the pupil of the objective (See for example col. 5, lines 5-18). Thus, it would have been obvious to one having ordinary skill in the art at the time the invention

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was made to have the optical system also maintain the image of the optical component in the pupil of the objective, as taught by Kawano et al., in the scanning microscope of Hoffman, for the purpose of providing the appropriate illumination intensity distribution and incidence angles of the incident light beam at the specimen plane based on the optical component used to shape the focus of the incident light beam, as required by the intended application.

6. Claims 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoffman in view of Kawano et al. as applied to Claims 17-18, 34 above, and further in view of Takagi et al. (U.S. Patent No. 5140458), of record.

Hoffman in view of Kawano et al. discloses the invention as set forth above in Claims 17-18, 34, except for a motor being configured to move or adjust at least one of the optical system, being in the form of a varifocal optical system, and the optical component. However, Takagi et al. teaches a conventional optical illuminating and observation system for use in a microscope or camera (See for example Abstract; Figures 1-4), wherein the illumination optics includes lenses (See for example L₇, L₈ in Figure 1) in the form of a zooming or magnification optical system that may be adjusted via motors and gears (See for example ILz, 31, 32, 33, 34, 52, 53, 57, 42 in Figures 1-2; col. 3, line 6-col. 4, line 51). Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have a motor be configured to move or adjust at least one of the optical system, being in the form of a varifocal optical system, and the optical component, as taught by Takagi et al., in the microscope of Hoffman in view of Kawano et al., for the purpose of providing an automated driving adjustment force to the

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lenses to allow them to move, thus allowing for adjustment of the optical magnification or optical zoom of the microscope optical system.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Arnel C. Lavarias whose telephone number is 571-272-2315. The examiner can normally be reached on M-F 10:00 AM - 6:30 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephone B. Allen can be reached on 571-272-2434. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Arnel C. Lavarias
Primary Examiner
Group Art Unit 2872
3/2/09

/Arnel C. Lavarias/
Primary Examiner, Art Unit 2872